

ABSTRACT

Automatic energy management is provided, in even the most complex multi-building system. The necessity of a human operator for managing energy in a complex, multi-building system is reduced and even eliminated. Computer-based monitoring and computer-based recognition of adverse energy events (such as the approach of a new energy peak) is highly advantageous in energy management. Immediate automatic querying of energy users within a system of buildings for energy curtailment possibilities is provided. Such immediate, automatic querying may be answered by the energy users through artificial intelligence and/or neural network technology provided to or programmed into the energy users, and the queried energy users may respond in real-time. Those real-time computerized responses with energy curtailment possibilities may be received automatically by a data processing facility, and processed in real-time. Advantageously, the responses from queried energy users with energy curtailment possibilities may be automatically processed into a round-robin curtailment rotation which may be implemented by a computer-based control system. Thus, impact on occupants is minimized, and energy use and energy cost may be beneficially reduced in an intelligent, real-time manner. The invention also provides for early-recognition of impending adverse energy events, optimal response to a particular energy situation, real-time analysis of energy-related data, etc.